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| 10/500,825 | 07/07/2004 | Harald Hofmann | 502902-183PUS | 8491 |

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| EXAMINER |
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GRAMLING, SEAN P

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| ART UNIT | PAPER NUMBER |
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2875

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05/24/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/500,825 | Applicant(s) HOFMANN ET AL. | |
| | Examiner SEAN P. GRAMLING | Art Unit 2875 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-15 and 17-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-15 and 17-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

1. Acknowledgment is made of Amendment filed February 17, 2010. Claims 1-2, 4-15 and 17-27 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-2, 4-9, 15, 22-24 and 27** are rejected under 35 U.S.C. 102 (b) as being anticipated by *Johnson* (US 5,463,280).
4. Regarding claim 1, Johnson discloses a lamp comprising a base 14 at a base end of the lamp for connection to a luminaire-side lamp fitting; a plurality of LED elements 16 spaced apart from the base in a longitudinal direction from the base end to an opposing end of the lamp and combined to form one module arranged on the base; and at least non-LED lamp element 42 arranged on the base; wherein the LED elements 16 in the module are aligned substantially in the longitudinal direction of the lamp (see Figures 1-3 and column 3, line 55 through column 8, line 15).
5. Regarding claim 2, the module in Johnson is a separately formed element and fixed to the base 14 of the lamp (see Figures 1-2).

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6. Regarding claim 4, the LED elements 16 in Johnson are aligned essentially along a longitudinal axis of the lamp (see Figures 1-2).
7. Regarding claim 5, the LED elements 16 in Johnson are designed such that they can be dimmed and/or switched on or off (see at least Figure 9 and column 7, lines 11-27).
8. Regarding claim 6, the module in Johnson is essentially light-permeable (light travels through the caps of the LED elements 16, see Figures 2-3).
9. Regarding claim 7, the module in Johnson is designed to be at least partially essentially reflective or light-scattering (substrates 30, 36 serve as partially reflective surfaces, see Figures 2-3).
10. Regarding claim 8, a bulb element 12 in Johnson is provided which at least partially envelopes the module (see Figure 1).
11. Regarding claim 9, the bulb element 12 in Johnson is made of a plastic material (see column 4, lines 7-9).
12. Regarding claim 15, the bulb element 12 in Johnson is in the form of a diffuser (see Figure 1 and column 2, lines 60-63).
13. Regarding claim 22, the bulb element 12 in Johnson at least partially envelops both the module having the LED elements and the non-LED lamp element (see Figures 1-3).
14. Regarding claim 23, the lamp in Johnson is essentially symmetrical with respect to a central plane of the lamp (see Figure 1).

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15. Regarding claim 24, the module in Johnson is arranged centrally on the base (see Figure 1).

16. Regarding claim 27, the LED elements 16 in Johnson are provided on one side of the module (see Figures 2-3).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Johnson* (US 5,463,280).

19. Regarding claim 25, at least two modules in Johnson are arranged symmetrically along a central plane of the lamp (see Figures 1-3), but they are not spaced apart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to space the two modules apart to provide better heat dissipation, and since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

20. Regarding claim 26, at least two sections of a module in Johnson are arranged spaced apart from one another symmetrically along a central plane of the lamp (see Figures 1-3), but they are not spaced apart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to space the two modules

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apart to provide better heat dissipation, and since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

21. **Claims 10-14** are rejected under 35 U.S.C. 103 (a) as being unpatentable over *Johnson* (US 5,463,280) and further in view of *Chan* (US 2003/0021117).

22. Regarding claims 10-14, *Johnson* teaches that the bulb element 12 be of a plastic material in the form of a diffuser (see column 2, lines 60-63 and column 4, lines 7-9), but does not specify that the bulb element 12 contain fluorescent diffusers capable of converting UV radiation emitted from the LED elements into visible light. However, *Chan* teaches a plastic bulb element 5 with diffusers made of fluorescent material 1 that would convert UV light components emitted from LED elements 2 into visible light (see Figure 2 and paragraphs [0023] and [0034]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide fluorescent diffusers along a surface of the bulb element 12 in *Johnson* as taught by *Chan* in order to achieve additional colored or white lighting through color blending and a uniform refraction of light through the bulb element in all directions for environmental lighting (see *Chan*, paragraph [0013]). In regards to claims 11 and 12, *Johnson* does not specify that the plastic diffuser bulb element 12 be formed through plastic-injection molding and does not specify that fluorescent diffusers be either admixed to the bulb or part of the plastic. However, the method of forming the bulb element is not germane to the issue of patentability of the lamp itself and therefore has not been given patentable weight.

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23. **Claims 1-2, 4-5, 8 and 17-22** are rejected under 35 U.S.C. 103 (a) as being unpatentable over *Harbers* (US 6,586,882) and further in view of *Johnson* (US 5,463,280).

24. Regarding claim 1, *Harbers* discloses a lamp comprising at least one base 7 at a base end of the lamp for connection to a luminaire-side lamp fitting; a plurality of LED elements 2 spaced apart from the base in a longitudinal direction from the base end to an opposing end of the lamp and combined to form one module arranged on the base 7; and at least one non-LED lamp (1, 3) arranged on the base (see Figure 1). *Harbers* teaches that additional LED elements can be added (see column 4, lines 58-60), but does not teach that the LED elements 2 be aligned substantially in the longitudinal direction of the lamp. However, *Johnson* specifically teaches the alignment of LED elements in the longitudinal direction of a lamp (see *Johnson*, Figures 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the LED elements in *Harbers* in a longitudinal direction in order to allow for an increased number of LED elements and increased brightness of the lamp as taught by *Johnson*, and since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

25. Regarding claim 2, the module in *Harbers* is a separately formed element and is fixed to the base 7 of the lamp (see Figure 1).

26. Regarding claim 4, *Harbers* teaches that additional LED elements can be added (see column 4, lines 58-60), but does not teach that the LED elements 2 be aligned substantially in the longitudinal direction of the lamp. However, *Johnson* specifically

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teaches the alignment of LED elements in the longitudinal direction of a lamp (see Johnson, Figures 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the LED elements in Harbers in a longitudinal direction in order to allow for an increased number of LED elements and increased brightness of the lamp as taught by Johnson, and since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

27. Regarding claim 5, the LED elements 2 in Harbers are designed such that they can be dimmed and/or switched on/off (see Figure 1 and column 4, lines 46-62).

28. Regarding claim 8, a bulb element 5 at least partially envelopes the module (see Figure 1).

29. Regarding claim 17, the lamp element in Harbers has a fluorescent layer 3 (see Figure 1 and column 3, line 66 through column 4, line 10).

30. Regarding claim 18, the lamp element and the module in Harbers are arranged so that LED radiation hits the fluorescent layer 3 of the lamp element (see Figure 1 and column 3, lines 58-65).

31. Regarding claim 19, multiple reflections take place between the fluorescent layer 3 and the module (see Figure 1).

32. Regarding claim 20, the lamp element (1,3) in Harbers is in the form of a compact fluorescent lamp (see Figure 1 and column 3, line 57 through column 4, line 10).

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33. Regarding claim 21, the lamp element (1, 3) in Harbers is designed such that it can be dimmed and/or switched on or off (see Figure 1 and column 4, lines 46-62).

34. Regarding claim 22, the lamp in Harbers further comprises a bulb element 5 which at least partially envelops both the module having the LED elements 2 and the non-LED lamp element (1, 3) (see Figure 1).

Response to Arguments

35. Applicant's arguments filed February 17, 2010 with respect to the rejections of the claims in the previous Office Action have been fully considered and are persuasive in that Applicant has properly perfected a claim of foreign priority through the filing of a certified translation, thereby disqualifying *Calon et al* (US 2002/0118538) as prior art. Therefore, the rejections have been withdrawn. However, upon further consideration, new grounds of rejection are made in view of *Johnson* and *Harbers* as set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN P. GRAMLING whose telephone number is (571)272-9082. The examiner can normally be reached on MONDAY-FRIDAY 7:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sean P Gramling
Examiner
Art Unit 2875

/SPG/

/Sandra L. O'Shea/
Supervisory Patent Examiner, Art Unit 2875